

The Health Benefits of Physical Activity for Adults and Older Adults

Physical activity is good for mental and physical health. The Chief Provincial Public Health Officer's *2015 Health Status of Manitobans Report: Healthy Environments, Healthy People* states that physical activity reduces stress, improves self-esteem, and prevents non-communicable diseases¹. Being physically active may also protect against some mental health problems¹. Communities that provide opportunities to be physically active are more likely to have lower rates of depression and anxiety across all life stages¹. Regular participation in physical activity is also associated with a reduced risk of cognitive decline.^{2,3,4,5}

Physical Activity Recommendations for Adults (18- 64)⁶ and Older Adults (65 and up)⁷

In order to achieve health benefits and improve functional abilities:

- Adults and older adults should accumulate at least 150 minutes of moderate- to vigorous-intensity aerobic physical activity per week, in bouts of 10 minutes or more.
- It is also beneficial to add muscle and bone strengthening activities using major muscle groups, at least 2 days per week.
- Older adults should perform physical activities to enhance balance and prevent falls.
- More physical activity provides greater health benefits.

Canadian Physical Activity Guidelines Evidence^{8,9}

The Canadian Physical Activity Guidelines are relevant to adults and older adults* irrespective of gender, race, ethnicity or socio-economic status. Individuals are encouraged to participate in a variety of physical activities that are enjoyable and safe.

Following the guidelines can reduce the risk of premature death, coronary heart disease, stroke, hypertension, colon cancer, breast cancer, type 2 diabetes and osteoporosis. Physical activity can improve fitness and mental health. The potential benefits far exceed the potential risks associated with physical activity.

Even a small amount of physical activity may provide some health benefits for those who are currently not active. These individuals should start small and gradually increase duration, frequency and intensity as a stepping stone to meeting the recommended amounts of physical activity.

Physical Activity and Mental Health Evidence

Regular physical activity can make us feel better and improve our state of mind and wellbeing.^{10,11} There is a sufficiently robust evidence base to confirm a strong relationship between physical activity and a number of dimensions of mental health.¹² Existing evidence suggests physical activity may prevent and help treat mental illness, as well as enhance well-being for those with existing mental or physical illness. In terms of using structured exercise to treat mental illness, the strongest evidence is in the area of clinical depression.¹²

Physical Activity and Dementia Evidence

Dementia is a syndrome – usually of a chronic or progressive nature – in which cognitive function deteriorates (i.e. the ability to process thought) beyond what is expected from normal aging.¹³ The

* The guidelines may be appropriate for those who are pregnant, , people with a disability or a medical condition, older adults with frailty; however, these individuals should consult a health professional to understand the types and amounts of physical activity appropriate based on their exercise capacity and specific health risks or limitations. See www.csep.ca/guidelines for more information.

impairment in cognitive function is commonly accompanied or preceded, by deterioration in emotional control, social behaviour, or motivation.¹³

Recent research suggests that dementia is not an inevitable consequence of aging and that nine modifiable factors (including physical activity) could lower the risk of dementia and may reduce or delay cognitive decline.³ More research on dementia and physical activity is needed.

Alzheimer's disease is the most common cause of dementia and may contribute to 60–70% of cases.¹³ Physical activity is a promising intervention for preventing and managing Alzheimer's disease² and physical activity researchers recently released the following evidence-based statement:

“Regular participation in physical activity is associated with a reduced risk of developing Alzheimer's disease. Among older adults with Alzheimer's disease and other dementias, regular physical activity can improve performance of activities of daily living and mobility, and may improve general cognition and balance”.^{2,†}

What can communities do?

The environments we create have significant impact on our physical and mental health. The “built environment” refers to the human-made or modified physical surroundings in which people live, work and play.¹ The image below¹ shows how the built environment can be altered to increase health and wellness:



Other examples include age friendly and dementia friendly communities. Age-friendly communities are built on the World Health Organization’s healthy aging framework, which encourages active aging by optimizing opportunities for health, participation and security in order to enhance quality of life as people age.¹⁴ Dementia friendly communities include and support people with dementia in the places they work, live and play.¹⁵

What can individuals do^{6,7}?

- Rake the lawn or shovel your sidewalk, and then offer to do the same for a neighbour.
- Take up a favourite sport again or try a new sport.
- Be active with the family on the weekend!
- Join a weekday community running or walking group.
- Go for a brisk walk around your community after dinner.
- Participate in a cultural activity such as dancing.
- Bike or walk to your destination.
- Check out your school, community or recreation centre.
- Get engaged in making the community a better place.

[†] The statement does not say how much activity is needed as there is insufficient evidence for determining the dose-response relationship.²

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- ¹ Chief Provincial Public Health Officer. Health Status of Manitobans Report: Healthy Environments, Healthy People, 2015.
- ² Ginis, Kathleen A. Martin et al. "Formulation of Evidence-Based Messages to Promote the Use of Physical Activity to Prevent and Manage Alzheimer's Disease." *BMC Public Health* 17 (2017): 209. PMC. Web. 27 July 2017.
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5316179/>
- ³ Livingston, Gill et al. Dementia prevention, intervention, and care www.thelancet.com Published online July 20, 2017
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- ⁴ Barnes, Jill N. American Physiological Society. Exercise, cognitive function, and aging. *Advances in Physiology Education*
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4587595/>
- ⁵ Blondell Sarah J., Hammersley-Mather, Rachel and Lennert Veerman J., Does physical activity prevent cognitive decline and dementia?: A systematic review and meta-analysis of longitudinal studies *BMC Public Health*, 2014
- ⁶ Canadian Society for Exercise Physiology. Canadian Physical Activity Guidelines for Adults.
http://www.csep.ca/CMFiles/Guidelines/CSEP_PAGuidelines_adults_en.pdf
- ⁷ Canadian Society for Exercise Physiology. Canadian Physical Activity Guidelines for Adults.
http://www.csep.ca/CMFiles/Guidelines/CSEP_PAGuidelines_older-adults_en.pdf
- ⁸ Canadian Society for Exercise Physiology. Canadian Physical Activity Guidelines for Adults Scientific Statement 2011
http://www.csep.ca/CMFiles/Guidelines/CanadianPhysicalActivityGuidelinesStatements_E%203.pdf
- ⁹ Canadian Society for Exercise Physiology. Canadian Physical Activity Guidelines for Older Adults Scientific Statement 2011
http://www.csep.ca/CMFiles/Guidelines/CanadianPhysicalActivityGuidelinesStatements_E%204.pdf
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- ¹¹ Stanton R, Reaburn P. Exercise and the treatment of depression: a review of the exercise program variables. *J Sci Med Sport*. 2014;17(2):177-182.
- ¹² Faulkner, Guy. Alberta Centre for Active Living. Sweat is the best antidepressant: But where do we go from here? Wellspring, March 2016 <https://www.centre4activeliving.ca/news/2016/03/mental-health-depression/> Retrieved November 22, 2017.
- ¹³ World Health Organization. Dementia. <http://www.who.int/mediacentre/factsheets/fs362/en/> Retrieved November 22, 2017.
- ¹⁴ Manitoba Health, Seniors and Active Living. Age Friendly Manitoba Initiative. <https://www.gov.mb.ca/seniors/afmb/index.html>
- ¹⁵ Alzheimer Society of Manitoba. Dementia Friendly Communities. https://alzheimer.mb.ca/we-can-help/programs-and-services/dfc/?gclid=EAlaQobChMlvMnDoY7T1wIVkbfACh07dwhDEAAYAiAAEgKRr_D_BwE